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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,245	01/24/2002	Douglas Ross Cardy	CCK94028	3727

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EXAMINER	
ESCALANTE, OVIDIO	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/054,245	CARDY ET AL.	
	Examiner	Art Unit	
	Ovidio Escalante	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-10 and 32-39* is/are allowed.

6)☒ Claim(s) *11-13,22-24,26-31 and 40-62* is/are rejected.

7)☒ Claim(s) *14-21 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/05/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on August 29, 2006. **Claims 1-62** are now pending in the present application.

Allowable Subject Matter

2. Claims 1-8,9,10,32-39 are allowed.

3. Claims 14-21,25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Information Disclosure Statement

4. The information disclosure statement submitted on July 05, 2006 was received. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 11-13,22-24,26-31,40-46,51-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Christie et al. US Patent 6,181,703.

Regarding claim 11, Christi teaches an apparatus (fig. 2; fig. 3; col. 7, lines 52-65) comprising:

switch intelligence (signaling processor/origination manager 522) configured to:

receive notification of an event associated with a call from a switch fabric, (col. 5, lines 26-39; col. 11, lines 1-10; col. 15, lines 10-35; col. 6, lines 45-56; IAM notifications are received), wherein the switch intelligence is implemented in a separate network element from a network element implementing the switch fabric, (col. 5, lines 11-25),

execute a call state machine, (col. 11, lines 30-35), the call state machine being responsive to the notification of the event and representing processing of the call as at least one call segment, (col. 15, lines 14-35), wherein the at least one call segment corresponds to a call half, (col. 15, lines 10-29), (origination manager 522 executes call processing in accordance with the Basic call Model as well as maintaining in a call control block at least call status information),

provide an association between the at least one call segment and at least one physical device associated with completing the call, (col. 11, lines 12-35; col. 15, lines 47-54), and

provide connection information to the switch fabric based on the association, (figs. 2,3 and 5; col. 15, lines 47-54; col. 16, lines 9-17).

Regarding claim 12, Christi, as applied to claim 11, teaches wherein said network element implementing the switch intelligence is physically separated from said network element implementing the switch fabric and is coupled to the network element implementing the switch fabric via a communications network, (col. 5, lines 11-25).

Regarding claim 13, Christi, as applied to claim 11, teaches wherein the network element implementing said switch intelligence is logically separated from the network element implementing said switch fabric, (col. 5, lines 11-25).

Regarding claim 22, Christi teaches an apparatus (signaling processor - figs. 2 and 3) comprising:

a switch intelligence for providing control functions to at least one switch fabric, (signaling processor/origination manager 522; col. 5, lines 26-39; col. 15, lines 47-54), the switch intelligence comprising:

processing logic configured to:

receive information from the at least one switch fabric, the information including a facility related event associated with a call, (col. 5, lines 26-39; col. 15, lines 10-35),

process the received information, (col. 11, lines 12-35; col. 15, lines 10-35),

maintain call states in accordance with a call model for at least one party involved in the call, (col. 11, lines 30-35), and

provide connection information to the at least one switch fabric for completing the call, (figs. 2,3 and 5; col. 15, lines 47-54; col. 16, lines 9-17).

Regarding claim 23, Christi, as applied to claim 22, teaches wherein said switch intelligence is one of logically separated or physically separated from said at least one switch fabric, (col. 5, lines 11-25), the processing logic being further configured to:

identify at least one point in the call where a telecommunications function is required, (col. 11, lines 12-35; col. 15, lines 10-35; fig. 7-9), and

send a request for the telecommunications function to a processor in response to the identified at least one point in the call, (figs. 2,3 and 5; col. 15, lines 47-54; figs 7-9).

Regarding claim 24, Christi, as applied to claim 23, teaches a processor executing the telecommunications function in response to the request, (col. 11, lines 12-35).

Regarding claim 26, Christi, as applied to claim 22, teaches wherein said switch intelligence provides control functions to a plurality of switch fabrics, (figs. 2,3 and 5).

Regarding claim 27, Christi, as applied to claim 22, teaches wherein said switch intelligence further comprises at least one of a facility service, a call connection manager service or a call segment instance service, (col. 11, lines 30-35; col. 15, lines 47-54).

Regarding claim 28, Christi, as applied to claim 27, teaches wherein said at least one of a facility service, a call connection manager service or a call segment instance service comprises a call segment instance service, the call segment instance service configured to maintain the call states for the at least one party involved in the call, (col. 11, lines 30-35).

Regarding claim 29, Christi teaches an apparatus comprising:

means for receiving switch-fabric communication from a switch-fabric, the switch-fabric communications including event information associated with a call, (col. 5, lines 26-39; col. 15, lines 10-35);

means for processing the switch-fabric communications, (col. 5, lines 26-39; col. 15, lines 14-35);

wherein the means for processing is configured to maintain call states in accordance with a call model for at least one party involved in the call and generate connection information for completing the call, (col. 11, lines 30-35); and

means for translating the connection information into switch-fabric communications for use by a switch fabric, (figs. 2,3 and 5; col. 15, lines 47-54; col. 16, lines 9-17).

Regarding claim 30, Christi teaches an apparatus, comprising:

means for translating switch-fabric communications into communications defined according to a uniform switch-intelligence interface, (col. 5, lines 11-25);

means for processing the switch fabric communications comprising event information associated with a call, (col. 11, lines 1-10; col. 15, lines 10-35), the means for processing being configured to:

maintain call states for at least one party involved in the call in accordance with a call model and execute the call model to generate connection information for completing the call, (col. 11, lines 10-35); and

means for translating the communications defined according to the uniform switch-intelligence interface into switch-fabric communications, (col. 15, lines 47-54).

Regarding claim 31, Christi, as applied to claim 30, teaches means for translating communications defined according to the uniform interface into switch-intelligence communications, (col. 15, lines 47-54); and

means for translating switch-intelligence communications into communications defined according to a uniform interface, (col. 5, lines 26-39; col. 15, lines 47-54).

Regarding claim 40, Christi teaches an apparatus (figs. 2 and 3; signaling processor) comprising:

a switch intelligence network element for controlling a switch fabric network element wherein said switch intelligence network element (col. 5, lines 26-39; col. 15, lines 47-54) comprises:

processing logic configured to:

receive notification information from the switch fabric network element associated with a call (col. 15, lines 10-35) and

perform call half processing for at least one party associated with the call in response to the notification information and in accordance with a cal model, (col. 11, lines 12-35; col. 15, lines 10-29).

Regarding claim 41, Christi, as applied to claim 40, teaches perform the call half processing in accordance with a call model, the call model representing at least one of an Advanced Intelligent Network (AIN) call model, an International Telecommunications Union (ITU) call model or a call model created by a service provider, (col. 11, lines 30-40).

Regarding claim 42, Christi, as applied to claim 40, teaches wherein said switch intelligence network element includes at least one of a first application programming interface communicable with a switch-fabric proxy service or a second application programming interface communicable with a feature processor that executes at least one telecommunications function, (col. 15, lines 47-54).

Regarding claim 43, Christi, as applied to claim 40, teaches one application programming interface communicable between at least one of a facility service, a call connection manager service or a call segment instance service and another of said at least one of a facility service a call connection manager service or a call segment instance service, (col. 11, lines 30-35; col. 15, lines 47-54).

Regarding claim 44, Christi teaches an apparatus (signaling processor) comprising:

a feature processor for executing at least one telecommunications function, (col. 7, lines 52-65); and

switch intelligence (signaling processor/origination processor - figs. 2 and 3) configured to:

receive facility data associated with a call from a switch fabric, perform call half processing associated with at least one party to the call in response to the facility data and in accordance with a call model, (col. 11, lines 1-10; col. 15, lines 10-35), and

provide connection information to an entity that received the call wherein the connection information identifies physical connections to complete the calls wherein the switch intelligence is implemented in at least one network element the at least one network element being a separate network element from the entity that received the call, (col. 5, lines 11-25; col. 15, lines 47-54).

Regarding claim 45, Christi teaches an apparatus for controlling a switch fabric the apparatus being implemented in at least one network element -the at least one network element being separate from the switch fabric (col. 5, lines 11-25) the apparatus comprising:

logic for processing facility information received from the switch fabric in accordance with a call model, (col. 11, lines 12-35; col. 15, lines 10-29);

logic for performing call half processing for at least one party involved in the call in response to the facility information and in accordance with the call model, (col. 11, lines 12-35; col. 15, lines 10-29); and

logic for forwarding connection information to the at least one switch fabric, (col. 11, lines 12-35; col. 15, lines 10-29; figs. 2,3 and 7).

Regarding claim 46, Christi, as applied to claim 45, teaches interface logic including a first interface for communications between the apparatus and the switch fabric, (figs. 2,3 and 5).

Regarding claim 51, Christi teaches an apparatus, comprising:

logic configured to receive information from a switch fabric that received a request for making a call, the information comprising facility data, (col. 11, lines 1-10; col. 15, lines 10-35);

logic configured to perform call half processing for at least a first party or a second party associated with the call in response to the facility data and in accordance with a call model, (col. 15, lines 10-29; col. 11, lines 12-35);

logic configured to generate connection information for the entity that received the request, (col. 5, lines 11-25; col. 15, lines 47-54); and

logic configured to forward the connection information to the entity that received the request, (col. 15, lines 47-54).

Regarding claim 52, Christi, as applied to claim 51, teaches wherein the facility data comprises facility related event information, (col. 11, lines 30-35; col. 15, lines 47-54).

Regarding claim 53, Christi, as applied to claim 51, teaches wherein the apparatus is implemented in a network element that is separate from the entity that received the request, (col. 5, lines 11-25).

Regarding claim 54, Christi, as applied to claim 51, teaches wherein the logic configured to perform call half processing maintains call states associated with completing the call in accordance with a call model, (col. 11, lines 30-35).

Regarding claims 55,58 and 60, Christi, as applied to claims 11,29 and 40, teaches wherein the event/notification information comprises a facility related event, (col. 11, lines 30-35; col. 15, lines 47-54).

Regarding claims 56,57,59,61 and 62, Christi, as applied to claims 22,45,56,58 and 60, teaches wherein the facility related event/facility information comprises at least one of on-hook, off-hook or wink, (col. 15, lines 47-54).

7. Claims 47-50 are rejected under 35 U.S.C. 102(e) as being anticipated by LaPorta.

Regarding claim 47, La Porta teaches an apparatus comprising:

a call completion device for providing bearer functions, said call completion device performing communications with a switch intelligence that is implemented in a separate network element from said call completion device, (col. 2, line 44-66; col. 7, lines 11-25), the call completion device being configured to:

forward a facility related event associated with a call to the switch intelligence, (col. 7, lines 11-25), and receive bearer connection information from the switch intelligence in accordance with a call model executed by the switch intelligence, (col. 7, lines 11-25).

Regarding claim 48, La Porta, as applied to claim 47, teaches wherein the switch intelligence comprises a call state model and wherein the call completion device communicates with the switch intelligence to affect a call state, (col. 2, lines 44-66).

Regarding claim 49, La Porta, as applied to claim 48, teaches wherein the call state is represented in the call state model, (col. 2, lines 44-66).

Regarding claim 50, La Porta, as applied to claim 47, teaches a switch fabric proxy service for providing an application programming interface for communications between the call completion device and the switch intelligence, (col. 7, lines 41-65).

Response to Arguments

8. Applicant's arguments filed August 29, 2006 have been fully considered but they are not persuasive.

Regarding claim 47:

Applicant contends that LaPorta does not disclose that a call completion device (presumably one of switches 508 or 510 and/or one of channel servers 506 or 511) forwards a facility related event associated with a call to call server 502 or connection server 504. The examiner respectfully disagrees.

The Examiner notes that claim 47 does not clearly define "facility related event", therefore since LaPorta states in col. 7, lines 62-66, "As part of its route control functions, connection server 504 may retrieve relevant information from other connection servers or may query channel servers 506 and 511 for appropriate information", then it is clear that the "appropriate information - (facility related event) is forwarded to the call server.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7537, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is 571-272-7537. The examiner can normally be reached on M-Th from 6:30AM to 4:00PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S. Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OVIDIO ESCALANTE
PATENT EXAMINER

Ovidio Escalante

Ovidio Escalante
Primary Patent Examiner
Group 2614
September 15, 2006

O.E./oe